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ATTORNEY DOCKET NO. 10006615-1

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

SEP 0 6 2005

Inventor(s):

Aaron J. Loyd

Confirmation No.: 6454

Application No.:09/915,070

Examiner: Hassan Phillips

Filing Date:

July 25, 2001

Group Art Unit: 2151

Tite:

METHOD AND DEVICE FOR MONITORING THE PERFORMANCE OF A NETWORK

Mail Stop Appeal Brief-Patents Commissioner For Patents PO Box 1450 Alexandria, VA 22313-1460

#### TRANSMITTAL OF APPEAL BRIEF

Str:

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed July 6, 2005

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) \$500.00.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

()) (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d) RECEIVED for the total number of months checked below: OIPE/IAP

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( ) The extension fee has already been filled in this application.

(x) (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

. At any time during the Please charge to Deposit Account 08-2025 the sum of \$500.00 pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account Q8-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. A duplicate copy of this sheet is enclosed.

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Aaron J. Loyd

ÓŘ (X) I hereby certify that this paper is being transmitted to the Patent and Trademark Office facsimile number\_(671) 273-9300 on \_\_Sept. 6, 2005

Robert W. Nelson

Respectfully submitted,

Number of pages: 21

Attorney/Agent for Applicant(s) Reg. No.

37,898

Typed Name: Mariko Mizuno

Date: Sept. 6, 2005

Signature:

SEP 0 6 2005

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In Re Application of:

Confirmation No.: 6454

AARON J. LOYD

Examiner: Hassan Phillips

Serial No.: 09/915,070

Filing Date: July 25, 2001

Group Art Unit: 2151

for:

METHOD AND DEVICE FOR

MONITORING THE

PERFORMANCE OF A

**NETWORK** 

Attorney Dkt.: 10006615-1

#### APPEAL BRIEF

:To

Mail Stop Appeal Brief - Patents

**Commissioner for Patents** 

P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

This Appeal Brief is submitted in response to the final rejection of the claims mailed April 7, 2005. A Notice of Appeal was filed on July 6, 2005.

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This brief contains items under the following headings as required by 37 CFR §41.37 and MPEP §1206:

- Real Party In Interest
- II. Related Appeals, Interferences and Judicial Proceedings
- III. Status of Claims
- IV. Status of Amendments
- V. Summary of Claimed Subject Matter
- VI. Grounds of Rejection to be Reviewed on Appeal
- VII. Argument
- VIII. Claims
- IX. Evidence
- X. Related Proceedings

Appendix A Claims

Appendix B Evidence

Appendix C Related Proceedings

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## (I) REAL PARTY IN INTEREST

The real party in Interest in the above-referenced patent application is Hewlett-Packard Development Company, LP, having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A.

## (II) RELATED APPEALS, INTERFERENCES AND JUDICIAL PROCEEDINGS

There are no related appeals, interferences or judicial proceedings currently known to Appellant, Appellant's legal representatives or the assignee, which will directly affect, or be directly affected by, or have a bearing on, the Board's decision.

#### (III) STATUS OF CLAIMS

Claims 1-25 were filed with the application. Claims 2, 4-6, 10-12, 14-16, 18, 22, 23, and 26 were canceled during prosecution. Accordingly, claims 1, 3, 7-9, 13, 17, 19-21, and 24 are currently pending in the application. Claims 1, 3, 7-9, 13, 17, 19-21, and 24 stand rejected. The rejections of all claims 1, 3, 7-9, 13, 17, 19-21, and 24 are appealed.

## (IV) STATUS OF AMENDMENTS

No amendments were filed or entered subsequent to the final rejection mailed April 7, 2005.

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## (V) SUMMARY OF THE CLAIMED SUBJECT MATTER

The invention as claimed is summarized below with reference numerals and references to the specification and drawings. The invention is broadly set forth in the language corresponding to independent claims 1 and 13. Discussions about elements of the invention can be found at least at the locations in the specification and drawings cited in the claims below.

1. A method for monitoring the operation of an electronic network (100), said network (100) comprising a first electronic device (104) and a second electronic device (106), said method comprising:

determining the utilization of a first data path (132) between said first electronic device (104) and said second electronic device (106); [page 18, line 19 to page 19, line 4; page 19, lines 12-27]

determining the utilization of a second data path (139) between said first electronic device (104) and said second electronic device (106); [page 18, line 19 to page 19, line 4; page 19, lines 12-27]

comparing said utilization of said first data path (132) and said second data path (139) over a period of time; [page 18, line 19 to page 19, line 4; page 9, lines 12-27] and

providing an indication if said utilization of said first data path (132) increases a preselected amount and said utilization of said second data path (139) decreases a preselected amount during said period of time. [page 19, lines 33-35]

13. A monitoring device (156) for monitoring an electronic network (100), said electronic network (100) comprising a first electronic device (104) and a second electronic device (106), said monitoring device comprising:

a computer operatively connected to said network (100); [page 7, line 25 to page 8, line 2] and

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a computer-readable medium operatively associated with said computer, said computer-readable medium containing instructions for controlling said computer and said monitoring device (156) by [page 7, line 25 to page 8, line 2]:

determining a plurality of data paths between said first electronic device (104) and said second electronic device (106);

performing at least two measurements of a parameter of said network (100) on said data paths, said at least two measurements yielding the utilizations of said plurality of data paths [page 18, line 19 to page 19, line 4; page 19, lines 12-27]; and providing an indication in if the utilization of a first (132) of said data paths increases greater than a preselected amount and the utilization of a second (139) of said data paths decreases less than a preselected amount. [page 19, lines 33-35]

### (VI) ISSUES TO BE REVIEWED ON APPEAL

Claims 1, 3, 7-9, 13, 17, 19-21, and 24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Waclawsky (U.S. Patent 5,974,457). The appellant contends that the rejections are in error.

#### (VII) ARGUMENT

Claims 1, 3, 7-9, 13, 17, 19-21, and 24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Waclawsky (U.S. Patent 5,974,457). Appellants respectfully assert, for at least the reasons advanced below, that the rejected claims are not unpatentable over Waclawsky.

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#### Claims 1 and 13

Claims 1 and 13 were rejected on the same grounds. The appellant presents årguments against the rejection of claim 1 followed by a brief argument of against the rejection of claim 13. Appellant's claim 1 recites the following:

A method for monitoring the operation of an electronic network, sald network comprising a first electronic device and a second electronic device, said method comprising:

determining the utilization of a first data path between said first electronic device and said second electronic device;

determining the utilization of a second data path between said first electronic device and said second electronic device;

comparing said utilization of said first data path and said second data path over a period of time; and

providing an indication if said utilization of said first data path increases a preselected amount and said utilization of said second data path decreases a preselected amount during said period of time.

(emphasis added)

Appellants respectfully assert, for the reasons advanced below, that the Examiner's rejection is improper and that a prima facie case of obviousness has not been established.

MPEP Section 706.02(j) sets forth the following regarding the establishment of a prima facie case:

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of

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ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

The MPEP, thus, generally sets forth three requirements for establishing a prima facie case of obviousness:

- there must be some suggestion or motivation, either in the references 1. themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;
- there must be a reasonable expectation of success; and 2.
- the prior art reference (or references when combined) must teach or 3. suggest all the claim limitations;

In addition, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

Appellants respectfully assert that a prima facie case has not been established relative to claim 1 because:

- The prior art reference fails to teach or suggest all of the limitations of ١. either claim 1 or claim 13 (item 3 above); and
- There is no suggestion or motivation to modify the reference (item 1 II. above);

These arguments are separately addressed below.

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# The Prior Art References Fail to Teach or Suggest all of the Limitations of Claim 1

The final office action dated April 7, 2005 states the following on page 4:

Waclawsky teaches a method and monitoring device for monitoring the operation of an electronic network, the network comprising a first electronic device and a second electronic device, the method comprising: determining the utilization of some media, or network component between the first electronic device and the second electronic device, (col. 7, lines 18-20, and col 12, lines 22-24)

In the following paragraph, the final office action states:

Although the method taught by Waclawsky shows substantial features of the claimed invention, it fails to expressly disclose: the media being a plurality of data paths.

Based on the foregoing, the final office actions states that the media being monitored is data paths. The final office action further states that Waclawsky teaches:

effecting routing changes after being provided with an indication that current network operating characteristics are outside the bounds of normal behavior, (col 7, lines 60-67, col. 8, lines 1-6).

The office action concludes that:

if not implicit in the teachings of Waclawsky, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Waclawsky to disclose the media being a plurality of data paths. Doing so would have demonstrated a specific example of how the teachings of Waclawsky could be used to monitor data paths, and determine when a data path is no longer operating normally, Waclawsky col. 7, lines 16-34.

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The Appellant contends that Waclawsky does not teach or suggest "providing an indication if said utilization of said first data path increases a preselected amount and said utilization of said second data path decreases a preselected amount during said period of time" as claimed in claim 1.

The cited portions of Waclawsky relate to monotoring a single data device over time. More specifically, a device on a data path is monitored over time to determine if a characteristic is out of the bounds of normal behavior. Therefore, a benchmark or normal behavior is determined for a single device, which for the sake of argument, the Appellant will assume constitutes a single data path. This benchmark of "normal behavior" for the device is compared to the present operating characteristics of the device as set forth in the cited portions of Waclawsky. Indications are provided if the current characteristics of the device are out of bounds based on the normal behavior.

There is nothing disclosed in Waclawsky related to providing an indication if the use of a first data path (or device located thereon) increases and the use of a second data path (or device thereon) decreases. Rather, any comparison disclosed in Waclawsky is based on previous measurements (the benchmark) of the <u>same</u> device, not to other devices located in other data paths.

Again, Waclawsky is related to monitoring characteristics of devices based on benchmarks of those devices. There is no comparison of utilization between devices on different data paths and providing an indication if the utilization of one data path increases and another decreases as claimed in claim 1.

The applicants do not agree that either claim 1 or claim 13 is rendered obvious by Waclawsky. There is no teaching or suggestion of comparing the characteristics of a device located on a first data path to the characteristics of a device located on a second data path as claimed in claim 1.

As set forth above, claim 13 is independent and was rejected on the same grounds as claim 1. Therefore, the Appellant incorporates the rebuttals to the rejection of claim 1 into the rebuttal of the rejection of claim 13. As stated above,

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Waclawsky does not disclose or suggest "providing an indication in if the utilization of a first of said data paths increases greater than a preselected amount and the utilization of a second of said data paths decreases less than a preselected amount" as claimed in claim 13. Thus, Waclawsky cannot render claim 13 obvious.

Based on the foregoing, Waclawsky fails to teach or suggest all the limitations of either claim 1 or 13 and cannot render either claim 1 or 13 obvious.

## II. There is no Suggestion or Motivation to Modify the Reference Teachings as Proposed by the Examiner

Appellants respectfully assert that there is no motivation to modify Waclawsky as proposed by the final office action. As stated above, Waclawsky is related to monitoring devices over time and comparing the present characteristics of the devices to past characteristics. Thus, the comparison applied to a device is based on the past performance of the same device. There is no disclosure or even a suggestion related to "providing an indication if said utilization of said first data path increases a preselected amount and said utilization of said second data path decreases a preselected amount during said period of time" as claimed in claim 1. Thus, there is no motivation to modify Waclawsky as suggested by the office action.

For the reasons advanced above, the Appellant respectfully asserts that a prima facie case of obviousness has not been established relative to either claim 1 or 13.

#### Claims 3 and 7

Claims 3 and 7 are allowable as depending at least as ultimately depending from allowable base claim 1. For purposes of this appeal, claims 3 and 7 stand or fall with independent claim 1.

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#### Claims 8 and 20

Claim 8 and 20 are allowable as ultimately depending from allowable base claims 1 and 13, respectively. Claims 8 and 20 were rejected on the same grounds. The rejection of claim 8 is argued herein and claim 20 will stand or fall with claim 8. Claim 8 is allowable on further independent grounds in that Wackawsky does not disclose or suggest the method of claims 1 and 7, wherein:

wherein the values of said plurality of measurements that exceed said value of the average of previous measurements plus a preselected value are not used to calculate subsequent average values.

According to page 5 (item 10) of the final office action, Waclawsky does not disclose the elements of claim 8. The final office action does state that Waclawsky teaches a benchmark that can accumulate a more accurate average than a predefined average at column 4, lines 55-67 and column 5, lines 1-4.

These cited sections of Waclawsky disclose averaging different network characteristics and that comparisons may be performed on other standards. There is no disclosure in Waclawsky, however, related to "wherein the values of said plurality of measurements that exceed said value of the average of previous measurements plus a preselected value are not used to calculate subsequent average values" as claimed in claim 8.

Based on the foregoing, Waclawsky fails to teach or suggest the elements of claim 8 and cannot render either claim 8 or claim 20 obvious.

#### Claims 9 and 21

Claims 9 and 21 are allowable as ultimately depending from allowable base claim 1 and 13, respectively. Claims 9 and 21 were rejected on the same grounds and claims 21 will stand or fall with claim 9. Claim 9 is allowable on further

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ndependent grounds in that Wackawsky does not disclose or suggest the method of claims 1 and 7, wherein:

said providing an indication comprises providing an indication if the value of one of said plurality of measurements exceeds the mean of previous measurements of said parameter plus three times the square of said mean of previous measurements.

According to page 5 (item 10) of the final office action, Waclawsky does not disclose the elements of claim 9. The final office action does state that Waclawsky teaches:

providing an indication if a measurement exceeds the bounds of normal behavior, col. 7, lines 60-67, col. 8, lines 1-6.

Claim 9 provides a very precise comparison value. As such, just because Waclawsky provides an indication that a device is operating beyond the bounds of normal behavior does not infer that the device is operating beyond the limitations of claim 9. More specifically, there is no disclosure or suggestion in Waclawsky related to "said providing an indication comprises providing an indication if the value of one of said plurality of measurements exceeds the mean of previous measurements of said parameter plus three times the square of said mean of previous measurements" as claimed in claim 9.

Based on the foregoing, Waclawsky fails to teach or suggest the elements of claim 9 and cannot render either claim 9 or claim 21 obvious.

#### Claims 17, 18, and 24

Claims 17, 18, and 24 are allowable at least as ultimately depending from allowable base claim 13. For purposes of this appeal, claims 17, 18, and 24 stand br fall with independent claim 13.

For the reasons set forth above, appellants respectfully assert that all of the claims are allowable and that, accordingly, all of the rejections should be reversed.

#### VIII CLAIMS

A copy of the claims involved in the present appeal is attached hereto as Appendix A. As indicated above, the claims in Appendix A do not incorporate any amendments after final rejection.

#### IX EVIDENCE

No evidence pursuant to §§ 1.130, 1.131 or 1.132 or entered by or relied upon by the examiner is being submitted.

#### X RELATED PROCEEDINGS

No related proceedings are referenced in II above or copies of decisions in related proceedings are not provided, hence no Appendix is included.

Serial No. 09/915,070 Aaron J. Loyd Atty Dkt. 10006615-1

Respectfully submitted,

KLAAS, LAW, O'MEARA & MALKIN, P.C.

Dated: September 6, 2005

Robert W. Nelson Registration No. 37,898 1999 Broadway, STE 2225 Denver, CO 80202

(303) 298-9888

## APPENDIX A CLAIMS

 A method for monitoring the operation of an electronic network, said network comprising a first electronic device and a second electronic device, said method comprising:

determining the utilization of a first data path between said first electronic device and said second electronic device;

determining the utilization of a second data path between said first electronic device and said second electronic device;

comparing said utilization of said first data path and said second data path over a period of time; and

providing an indication if said utilization of said first data path increases a preselected amount and said utilization of said second data path decreases a preselected amount during said period of time.

- 3. The method of claim 1, wherein sald determining the utilization of said first data path and determining the utilization of said second data path comprises performing a plurality of measurements.
- 7. The method of claim 1, wherein said determining the utilization of said data paths comprises performing a plurality of measurements of a parameter of said network on said first data path; and wherein said providing an indication comprises providing an indication if the value of at least one of said plurality of measurements exceeds the value of the average of previous measurements by a preselected amount.

- 8. The method of claim 7, wherein the values of said plurality of measurements that exceed said value of the average of previous measurements plus a preselected value are not used to calculate subsequent average values.
- 9. The method of claim 7, wherein said providing an indication comprises providing an Indication if the value of one of said plurality of measurements exceeds the mean of previous measurements of said parameter plus three times the square of said mean of previous measurements.
- 13. A monitoring device for monitoring an electronic network, said electronic network comprising a first electronic device and a second electronic device, said monitoring device comprising:

a computer operatively connected to said network; and

a computer-readable medium operatively associated with said computer, said computer-readable medium containing instructions for controlling said computer and said monitoring device by:

determining a plurality of data paths between said first electronic device and said second electronic device;

performing at least two measurements of a parameter of said network on said data paths, said at least two measurements yielding the utilizations of said plurality of data paths; and

providing an indication in if the utilization of a first of said data paths increases greater than a preselected amount and the utilization of a second of said data paths decreases less than a preselected amount.

- 17. The method of claim 13, wherein said parameter is response time.
- 19. The method of claim 13, wherein said providing an indication comprises providing an indication if the value of at least one of said plurality of

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measurements exceeds the value of the average of previous measurements by a preselected amount.

- 20. The method of claim 19, wherein the values of said plurality of measurements that exceed said value of the average of previous measurements plus said preselected value are not used to calculate subsequent average values.
- 21. The method of claim 13, wherein said providing an indication comprises providing an indication if the value of one of said plurality of measurements exceeds the mean of previous measurements of said parameter plus three times the square of said mean of previous measurements.
- 24. The method of claim 13, wherein said performing at least two measurements comprises providing a plurality of measurements of a parameter of said network on a first data path between said first electronic device and said second electronic device, and wherein said providing an indication comprises providing an indication if the values of said plurality of measurements exceed a preselected value for a preselected period.

#### APPENDIX B

#### IX EVIDENCE

No evidence pursuant to §§ 1.130, 1.131 or 1.132 or entered by or relied upon by the examiner is being submitted.

Serial No. 09/915,070

Aaron J. Loyd Atty Dkt. 10006615-1

### APPENDIX C

## X RELATED PROCEEDINGS

No related proceedings are referenced in II above or copies of decisions in related proceedings are not provided, hence no Appendix is included.

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